



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,382	01/27/2000	Tetsuro Ashida	0879-0249P	9804
2292	7590	01/13/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			VILLECCO, JOHN M	
			ART UNIT	PAPER NUMBER
			2612	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

84

Office Action Summary

Application No.

09/492,382

Applicant(s)

ASHIDA, TETSURO

Examiner

John M. Villecco

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed August 25, 2004 have been fully considered but they are not persuasive.
2. Regarding claim 1, applicant argues, on page 3 of the response, that in order to provide for advancement of successive stages, tones, or shades, an individual pixel is insufficient. In other words, more than one pixel is needed to determine the advancement of successive stages, tones, or shades. In order to clarify the examiners stance, it is noted that the fine gradation is interpreted to be the luminance value of each of the individual pixels in the initial image. The coarse gradation is interpreted to be the image after it is divided into the different luminance ranges specified by the user. Clearly, when taken as a whole, each individual pixel will have a different luminance value than the pixel next to it. Therefore, one pixel is not being interpreted by the examiner as the fine gradation. It is the group of all of the individual pixels that make up the image that make up the fine gradation.
3. Additionally, applicant argues that the combination of Moorman and Ueno is improper because Ueno does not disclose selecting a gradation area in association with a particular luminance range. However, Moorman is used to show that it is well known in the art to divide an image into various gradation of luminance. Ueno teaches that it is well known in the art to control the exposure of an image based on the luminance values of a specific selected area of an image. When taken in consideration with Moorman, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow a user to select one of the

Art Unit: 2612

gradation areas of Moorman for which to provide exposure control. Therefore, the combination of Moorman and Ueno is proper.

4. Furthermore, applicant argues that the implementation of a contour displaying processor would add more processing and thus negate the motivation used. However, since only a contour is being displayed there is a lot less processing power needed in processing an image and preparing the image for display. Therefore, the motivation for combining is proper.

5. Regarding claim 4, in the interview conducted on July 20, 2004, the examiner conceded that upon a cursory review of the Kadowaki reference that the reference does not disclose the designation of a luminance range by selecting color samples displayed on a screen. However, upon a more thorough review of the rejection and the limitations of the claim, Kadowaki discloses the ability to select a color from a group of colors displayed on the display. This is the reason that Kadowaki is used in the rejection. Moorman teaches dividing an image into gradations of luminance ranges and displaying those ranges using different colors. Ueno teaches selecting different areas within an image for which to perform exposure control. Therefore, Kadowaki is used merely to show that it is well known in the art to select certain colors within an image using a color pallet on a display. When used in conjunction with Moorman and Ueno it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow a user to select the gradation level for exposure correction using the color pallet of Kadowaki. The examiner greatly apologizes for the change in position to the Kadowaki reference.

6. For the reasons stated above, the rejections from the previous office action will be repeated.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1, 2, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moorman (U.S. Patent No. 5,041,911) in view of Ueno et al. (U.S. Patent No. 5,625,415).**

9. Regarding *claim 1*, Moorman discloses an exposure information feedback apparatus capable of informing the user of different levels of exposure within an image. More specifically, the apparatus is a camera (30) which includes a lens (31), an image sensor (12), and a display (46) for displaying the image captured by the image sensor (12). Before an imaging operation, the user selects or enters a plurality of range values to map to the image based on the pixel exposure value (interpreted to be the luminance). The digital signal processor (40) acts as both the gradation area dividing device and the color-coding device since the input digital code values (luminance values) are mapped into RGB output code values (col. 3, lines 60-68). Clearly the image is divided into areas of gradation coarser than gradations in the image-capturing, since the gradation in the image-capturing are based on individual pixel signals. See column 4, lines 1-68. After dividing the image into the gradation levels the color-coded image is displayed on the display device (46, col. 4, line 68). Furthermore, Moorman discloses that the image signals are stored in the recording device (42).

Art Unit: 2612

Moorman however fails to explicitly state that the system is able to select a gradation area and correct the image data or the exposure control based on the selected gradation area. Ueno, on the other hand, discloses the ability to select a portion of an image for which to base an exposure calculating operation on. Ueno teaches the ability to perform a pre-shooting operation to form a pre-shot image on the display. See Figures 7 and 8. The user then has the ability to select an area of the pre-shot image for which to base an exposure value on. The brightness of the area indication (700) is used to calculate a new stop value and shutter speed. By allowing the user to select an area of an image for which to base an exposure on, the system has the ability to form an image of a subject of the users liking using a proper exposure. See column 13, line 27 to column 14, line 48. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow a user of the camera of Moorman to select an area of the color-coded image for which to perform a proper exposure so that the user can compose an image with a proper exposure based upon the selected gradation level.

Additionally, neither Moorman nor Ueno specifically disclose a photometry device for determining the luminance of an image and performing auto exposure (AE) based on the luminance for the first exposure. While Ueno does disclose that a pre-shot (first exposure) is taken, he only discloses that the pre-shot is performed using initial data (col. 11, lines 33-34). He does not disclose how the pre-shot data is obtained. However, Official Notice is taken as to the fact that it is well known in the art to use a photometric device to perform AE based on a luminance of a subject when an image signal has not yet been taken. By using a photometric device the system does not have to take an image of an object to determine an AE value. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

Art Unit: 2612

was made to use a photometric device to determine a luminance for an initial image capture since an image has not yet been capture for which to calculate an exposure value.

10. As for *claim 2*, as shown in the two tables in column 4 of Moorman, the digital signal processor (40) gives different color values to the different gradation areas.

11. *Claim 6* is considered a method claim corresponding to claim 1. Please see the discussion of claim 1 above.

12. **Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moorman (U.S. Patent No. 5,041,911) in view of Ueno et al. (U.S. Patent No. 5,625,415) and further in view of Takanashi et al. (U.S. Patent No. 6,313,923).**

13. With regard to *claim 3*, as mentioned above in the discussion of claim 1, both Moorman and Ueno disclose all of the limitations of the parent claim. However, neither of the aforementioned references discloses a contour sampling device that samples a contour of the subject or that the monitor displays the gradation areas and the contours. Takanashi, on the other hand, discloses that it is well known in the art to display only contours when image processing is not important. As disclosed in column 14, lines 56-67, when an image on a display is being rotated only the contours of the image are displayed. He does this because image processing is not necessary and therefore, the processing load can be reduced. Similarly, the imaging operation of Moorman would not require that the image be displayed. The only important aspect of Moorman is the displaying of colors based on the luminance values. Therefore, it would have been obvious to only display the contours of the image in Moorman so that image processing does not have to be performed, thus reducing the processing load.

14. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moorman (U.S. Patent No. 5,041,911) in view of Ueno et al. (U.S. Patent No. 5,625,415) and further in view Kadowaki (Japanese Publ. No. 08-202325 A).

15. Regarding *claim 4*, as mentioned above in the discussion of claim 1, both Moorman and Ueno disclose all of the limitations of the parent claim. Moorman teaches that a range for the luminance values can designated by the user by inputting upper and lower code values numbers and correlates to a gradation color as shown in column 4, lines 1-17. However, neither of the aforementioned references discloses that the luminance range designating device allows a user to select one color from color samples displayed on a screen of the image display unit. Kadowaki, on the other hand, discloses that it is well known in the art to allow a user to select a color sample displayed on a monitor in order to perform an operation. As shown in Figure 3, the display device (29) allows a user to select an area and change the color of a region (31) in an image based on selected color samples (51). Allowing a user to select a color sample displayed on the monitor, provides for ease of use. By incorporating the teaches of Kadowaki with the teachings of Moorman, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow a user to select a color to associate with a range of luminance values using color samples so that the operation of the device can be made easier.

16. *Claim 5* is considered substantively equivalent to claim 4. Please see the discussion of claim 4 above.

Art Unit: 2612

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any response to this final action should be mailed to:

Box AF
Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-6306, (for formal communications; please mark "**EXPEDITED PROCEDURE**"; for informal or draft communications, please label "**PROPOSED**" or "**DRAFT**")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

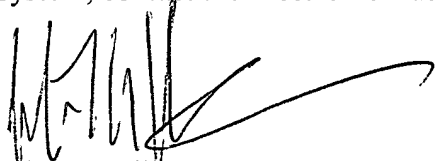
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Villecco whose telephone number is (703) 305-1460.

The examiner can normally be reached on Monday-Thursday.

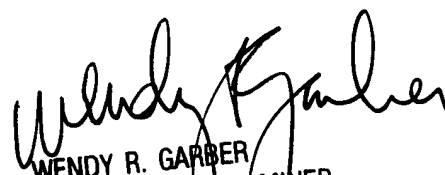
Art Unit: 2612

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John M. Villecco
January 5, 2005



WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600